

### Abstract

3 The invention comprises online methods, systems, and software for improving the  
4 processing of payments from financial accounts, particularly credit and debit card  
5 payments made from consumers to merchants in online transactions. The preferred  
6 embodiment of the invention involves inserting a trusted third party online service into the  
7 payment authorization process. The trusted third party authenticates the consumer and  
8 authorizes the proposed payment in a single integrated process conducted without the  
9 involvement of the merchant. The authentication of the consumer is accomplished over a  
10 persistent communication channel established with the consumer before a purchase is  
11 made. The authentication is done by verifying that the persistent channel is open when  
12 authorization is requested. Use of the third party services allows the consumer to avoid  
13 revealing his identity and credit card number to the merchant over a public network such  
14 as the Internet, while maintaining control of the transaction during the authorization  
15 process.